

**REMARKS AND RESPONSE TO RESTRICTION REQUIREMENT**

The Examiner has required restriction of the invention under 35 U.S.C. 121 to one of the following groups:

**Group I:** Claims 1 – 48, drawn to methods of identifying agents, classified in class 435, subclass 7.21 for example.

**Group II:** Claims 49 – 50, drawn to novel agents and pharmaceutical compositions comprising same, classification dependent upon structure.

**Group III:** Claims 51 – 56, drawn to methods of enhancing activity by administering agents, classification dependent upon structure.

With respect to Group I, the Examiner further requires restriction to one of the following neurotransmitter signaling pathways:

**Group I.A:** Cholinergic pathway

**Group IB:** Serotonergic pathway

**Group IC:** GABA pathway

Also with respect to Group I, the Examiner further requires a species election for a specific signaling pathway molecule from the following species:

1. muscarinic receptor
2. EGL-30
3. EGL-8
4. serotonin receptor
5. CAT-1
6. GOA-1
7. DGK-1
8. UNC-13
9. PKC
10. UNC-18
11. UNC-64
12. SNAP-25
13. synaptobrevin
14. UNC-31

Finally, also with respect to Group I, the Examiner requires a species election for a specific insulin signaling pathway molecule from the following species:

1. DAF-2
2. AAP-1
3. IRS
4. AGE-1
5. PDK-1
6. AKT-1
7. AKT-2
8. DAF-18

Applicants hereby elect the Group I invention (Claims 1 – 48, drawn to methods of identifying agents) under 35 U.S.C. §121 for prosecution in the present application, without traverse. Applicants further elect the cholinergic pathway for a neurotransmitter signaling pathway (Group IA) for prosecution in the present application. Applicants reserve the right to traverse the restriction between the non-elected groups in this or a separate application.

Applicants further elect the *species* of muscarinic receptor for the specific cholinergic signaling pathway molecule, and the *species* of Daf-2 for the specific insulin signaling pathway molecule, for search purposes only. It is the Applicants' understanding that under 35 U.S.C. §121, an election of a single species for prosecution on the merits is required, to which the claims will be restricted if no generic claim is finally held allowable. Applicants further understand that upon the allowance of a generic claim, they will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. §1.141 *et seq.*

Applicant believes no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. UMY-035 from which the undersigned is authorized to draw.

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Respectfully submitted,

By 

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